

United States Patent and Trademark Office

United States Parent and Trademark Office Address, COMMISSIONER OF PATENTS AND TRADEMARKS PO. Box 1450 Alexandria, Virginia, 22313-1480 awww.mpto.gev

CONFIRMATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. FILING DATE APPLICATION NO. Tomoki Fukushima 2756 010960 09/938,729 08/27 2001 05.15/2003 23850 7590 ARMSTRONG, WESTERMAN & HATTORI, LLP EXAMINER 1725 K STREET, NW CUEVAS, PEDRO J **SUITE 1000** WASHINGTON, DC 20006 ART UNIT PAPER NUMBER

DATE MAILED: 05/15/2003

2×34

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		09/938,729	FUKUSHIMA ET AL.
Office Action Summary		Examiner	Art Unit
		Pedro J. Cuevas	2834
	The MAILING DATE of this commun	ication appears on the cover sheet	with the correspondence address
Period fo	ORTENED STATUTORY PERIOD F	OD DEDLY IS SET TO EVDIDE 2	MONTH(S) EDOM
THE N - Exter after - If the - If NO - Failui	MAILING DATE OF THIS COMMUNI nsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comm period for reply specified above is less than thirty (3)	ICATION. of 37 CFR 1.136(a). In no event, however, may nunication. (0) days, a reply within the statutory minimum of the atutory period will apply and will expire SIX (6) Meanwill, by statute, cause the application to become	a reply be timely filed hirty (30) days will be considered timely. ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
•	d patent term adjustment. See 37 CFR 1.704(b).		
1) 🖂	Responsive to communication(s) fi	led on 24 February 2003	
2a)⊠		2b)☐ This action is non-final.	
3)		, 	natters, prosecution as to the merits is
	closed in accordance with the prac on of Claims	·	·
4)⊠	Claim(s) 14 is/are pending in the a	pplication.	
	4a) Of the above claim(s) is/a	re withdrawn from consideration.	
5)	Claim(s) is/are allowed.		
6)⊠	Claim(s) <u>1-4</u> is/are rejected.		
7)	Claim(s) is/are objected to.		
8)	Claim(s) are subject to restrict	ction and/or election requirement.	
Applicati	on Papers		
9) 🗌 -	The specification is objected to by th	e Examiner.	
10) 🗌 -	The drawing(s) filed on is/are:	a) ☐ accepted or b) ☐ objected to by	y the Examiner.
	Applicant may not request that any ob	<u>-</u>	•
11)[The proposed drawing correction file		disapproved by the Examiner.
40\[] ~	If approved, corrected drawings are re		
•	The oath or declaration is objected to	b by the Examiner.	
. —	inder 35 U.S.C. §§ 119 and 120		
	Acknowledgment is made of a claim	n for foreign priority under 35 U.S.C	2. § 119(a)-(d) or (f).
a)[All b) Some * c) None of:		
		documents have been received.	
		documents have been received in	
* S	•	of the priority documents have been ational Bureau (PCT Rule 17.2(a) on for a list of the certified copies n).
			C. § 119(e) (to a provisional application).
a) The translation of the foreign law Acknowledgment is made of a claim	nguage provisional application has	been received.
Attachmen	•	, - ,	
1) Notic	· · · e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F		ew Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)

Application/Control Number: 09/938,729

Art Unit: 2834

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatchtable over U.S. Patent No. 5,512,811 to Latos et al. in view of U.S. Patent No. 4,384,213 to Bogel, further in view of U.S. Patent No. 5,854,590 to Dalstein.

Latos et al. clearly teaches the construction of an engine generator apparatus (10) for rectifying and converting an alternating output of a generator, which has multi-phase windings (column 4, lines 13-16) and is driven by an engine, and converting the rectified output by an inverter (142) into an alternating current at the frequency of a power system and the alternating current is interconnected with the source of said power system.

However, it fails to disclose:

means for starting the interconnection with the system source when a direct current voltage rectified rises up to first predetermined level after the start up of the engine and then increasing the output of the inverter; means for canceling the interconnection when the direct current voltage drops down to below second predetermined level, and for re-starting the interconnection with the system source when the direct current voltage returns back to the first predetermined level;

fault detecting means for judging that the power generator has a fault when the direct current voltage drops down to below the second predetermined level after the restarting of the interconnection;

means where a generator fault signal is outputted, when the canceling and the restarting of the interconnection with the power system is repeated; and

means where a generator fault signal is outputted, when the canceling and the restarting of the interconnection with the power system is repeated wherein the output of the inverter is gradually increased at the start of the interconnection of the apparatus with the power system.

Bogel teach the construction of an automatic transfer control device having:

means for starting (52-1, 52-2) the interconnection with the system source when a direct current voltage rectified rises up to first predetermined level after the start up of the engine and then increasing the output of the inverter; and

means for canceling (52-1, 52-2) the interconnection when the direct current voltage drops down to below second predetermined level, and for re-starting the interconnection with the system source when the direct current voltage returns back to the first predetermined level.

Dalstein teach the use of a method for generating a fault indication signal comprising:

Application/Control Number: 09/938,729

Art Unit: 2834

fault detecting means (40) for judging that the power generator has a fault when the direct current voltage drops down to below the second predetermined level after the re-starting of the interconnection;

means where a generator fault signal (S) is outputted, when the canceling and the re-starting of the interconnection with the power system is repeated; and

wherein the output of the inverter is gradually increased at the start of the interconnection of the apparatus with the power system, for the purpose of distinguishing between permanent metal contact short-circuits and short-circuits due to arching.

It would have been obvious to one skilled in the art at the time the invention was made to use the method for generating a fault indication signal disclosed by Dalstein and the automatic transfer control device disclosed by Bogel on the engine generator apparatus disclosed by Latos et al. for the purpose of distinguishing between permanent metal contact short-circuits and short-circuits due to arching.

Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.
- 5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2834

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas May 12, 2003 7